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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,086	11/25/2003	David William Trepress	450110-04833	7893

7590

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EXAMINER

DAYE, CHELCIE L

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/723,086	TREPESS ET AL.	
	Examiner	Art Unit	
	Chelcie Daye	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/25/03, 9/7/04, 3/13/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is issued in response to Application filed November 25, 2003.
2. Claims 1-32 are pending.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 11/25/03, 9/7/04, and 3/23/06 was filed on/after the mailing date of the application on November 25, 2003. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the specification: Fig. 9, items 310 and 320. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the

sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

6. Claims 2-4,6-8,22,and 24-25 are objected to because of the following informalities: the term "characterizing" is misspelled. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 30-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 30-32 recite "a medium", which is not stated, defined, nor described within the specification, examiner is unsure of the specific subject matter of the claimed

invention. According to "The Microsoft Computer Dictionary", Fifth Edition; a medium is defined as a middle part of a range of possible values. In order to further prosecution, the claims will be examined with the broadest reasonable interpretation.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

10. Claims 19-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "and/or" in claims 19-22, is alternative language which renders the claim indefinite. Examiner is unsure whether the claimed invention requires both the video acquisition and the processing apparatus or whether the claimed invention requires only one or the other. The specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

11. Claim 22 recites the limitation "the common characterizing information feature". There is insufficient antecedent basis for this limitation in the claim.

Claim 22 recites the limitation "the common characterizing information feature" in the second line of the claim. Since claim 22 is dependent from claim 19, and claim 19 is dependent from any preceding claim, examiner is unsure as to what "common characterizing information feature" applicant is referring to, since there is no prior

mention of such feature within certain preceding claims. Therefore, there is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

12. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-32 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentability utility.

The basis of this rejection is set forth in a test of whether the invention is categorized as a process, machine, manufacture or composition of matter and if the invention produces a useful, concrete and tangible result. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) are found to be non-statutory subject matter. For a method claim to pass muster, the recited process must produce a useful, concrete and tangible result.

In the present case, claims 1-32 recite an information retrieval apparatus for receiving and processing map data information. However, the information retrieval apparatus fails to produce a tangible and useful result from the processed data, which is simply manipulation of an abstract idea.

Also, in the present case, claim 32 recites "transmission medium", which according to "The Microsoft Computer Dictionary", Fifth Edition; the definition is a substance in which signals can be transmitted. The transmission of signals is merely an

abstract idea, which is unable to be perceived by the senses. Therefore, claim 32 has no concrete and useful result.

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (lack of utility) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention with utility.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14. Claims 1,2,4,5,7,8,10-18,23 and 26-32, are rejected under 35 U.S.C. 102(e) as being anticipated by Saffer (US Patent No. 6,990,238) issued January 24, 2006.

Regarding Claims 1 and 23, Saffer discloses an information retrieval apparatus comprising

a mapping processor operable to receive data representative of a map of information items from a set of information items identified in a search (column 19, lines 4-38, Saffer), the map providing the identified information items with

respect to positions in an array in accordance with a mutual similarity of the information items, similar information items mapping to similar positions in the array (Fig.18; column 17, lines 36-57, Saffer), and

to process the map data to form a hierarchical clustering of information items (columns 8-9, lines 53-67 and 1-4, respectively, Saffer) providing a first clustering level of information items and at least one other clustering level of information items for clusters of information items within the first level clusters (column 10, lines 34-40, Saffer).

Regarding Claim 2, Saffer discloses an apparatus wherein the information items include a plurality of characterizing information features, the characterizing information features of each information item being used to form a feature vector for each information item (columns 9-10, lines 62-67 and 1-15, respectively, Saffer), the feature vector being used to form the map data by mapping the information item onto a position within the array (column 19, lines 31-38, Saffer).

Regarding Claim 4, Saffer discloses an apparatus wherein the characterizing information feature associated with each first level cluster and the other characterizing information feature associated with each cluster within the other clustering level of information items are formed from a most common characterizing information feature present in the information items associated with each cluster (column 12, lines 60-67, Saffer).

Regarding Claim 5, Saffer discloses an apparatus wherein the clusters of information items within one of the lower level clusters are associated with one another, whereas the other clusters of the first level are additional clusters of information items with respect to the information items within the lower level cluster (column 2, lines 23-39, Saffer).

Regarding Claim 7, Saffer discloses an apparatus wherein the information items comprise textual information, the characterizing information features being words (columns 15-16, lines 60-67 and 1-2, respectively, Saffer), and the feature vector for an information item is representative of a set of frequencies of occurrence, within that information item, of each of a group of words (column 11, lines 23-51, Saffer).

Regarding Claim 8, Saffer discloses an apparatus wherein the information items include textual information, the characterizing information features being words (columns 15-16, lines 60-67 and 1-2, respectively, Saffer), the positions within the array being mapped by mutual similarity of at least a part of the textual information (column 17, lines 36-57, Saffer).

Regarding Claim 10, Saffer discloses an apparatus wherein the information items are pre-processed for mapping (columns 10-11, lines 64-67

and 1-2, respectively, Saffer) by excluding words occurring within the textual information having less than a threshold frequency amongst the set of information items (column 30, lines 24-32, Saffer).

Regarding Claims 11 and 26, Saffer discloses an apparatus comprising a display processor operable in combination with a graphical user interface (Fig.18, Saffer) to display a representation of at least some of the positions of the array corresponds to identified information items as an n-dimensional display array of display points within a display area on a graphical display (columns 18-19, lines 64-67 and 1-8, Saffer).

Regarding Claims 12,18,27 and 28, Saffer discloses an apparatus wherein the display area includes at least two areas (Fig.16, Saffer), one area providing an n-dimensional representation of the first hierarchical level of clusters and the other area providing an n-dimensional representation of the other hierarchical level of clusters, where n is an integer (column 21, lines 14-28 and column 22, lines 10-27, Saffer).

Regarding Claim 13, Saffer discloses an apparatus comprising search processor for carrying out a word-related search of the information items (column 18, lines 64-67, Saffer);

the search processor and the graphical user interface being arranged to co-operate so that only those display points corresponding to identified information items are displayed (column 19, lines 4-38, Saffer).

Regarding Claim 14, Saffer discloses an apparatus wherein the display processor is operable to generate data representative of an indication which when displayed on the graphical user interface provides a user when viewing a first cluster in one of the hierarchical levels of a relative direction within an n-dimensional space of the location of another cluster within the hierarchical level (column 29, lines 21-33, Saffer).

Regarding Claim 15, Saffer discloses an apparatus wherein the display processor is operable to generate data representative of the number of information items within the other cluster (column 13, lines 5-14, Saffer), the number of information items being associated with the indication of the relative direction in the n-dimensional space of the other cluster with respect to the first cluster (column 29, lines 21-33, Saffer).

Regarding Claim 16, Saffer discloses an apparatus wherein the display processor is operable in combination with the graphical user interface (Fig. 16, Saffer) to display the indication of the relative direction of the other cluster within the first area of the graphical display (column 29, lines 21-33, Saffer), and the

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data representing the number of information items within the cluster is displayable with respect to the indication (column 13, lines 5-14, Saffer).

Regarding Claim 17, Saffer discloses an apparatus comprising a user control for selecting information items or clusters of information items within the n-dimensional space using a user controlled pointer (Fig.19; column 21, lines 40-54, Saffer), wherein the number of information items are display with respect to the indication of relative direction, in response to the pointer being positioned over the indication (column 30, lines 50-62, Saffer).

Regarding Claim 29, Saffer discloses computer software having program code for carrying out a method (column 5, lines 25-46, Saffer).

Regarding Claims 30 and 31, Saffer discloses a medium for providing program code, wherein the medium being a storage medium (column 5, lines 25-46, Saffer).

Regarding Claim 32, Saffer discloses a medium the medium being a transmission medium (column 5, lines 25-46, Saffer).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. **Claims 3,6,9,19,20,24, and 25, are rejected under 35 U.S.C. 103(a) as being unpatentable over Saffer (US Patent No. 6,990,238) filed September 30, 1999, as applied to claims 1,2,4,5,7,8,10-18,23 and 26-32, in view of Doerre (US Patent No. 6,446,061) filed June 30, 1999.**

Regarding Claims 3 and 24, Saffer discloses all of the claimed subject matter, as stated above. However, Saffer is silent with respect to providing the first clustering level of information items with a characterizing information feature associated with each of the first level clusters of information items and to provide a characterizing information feature for the clusters of information items within the first level clusters at the other hierarchical level. On the other hand, Doerre discloses providing the first clustering level of information items with a characterizing information feature associated with each of the first level clusters of information items and to provide a characterizing information feature for the clusters of information items within the first level clusters at the other hierarchical level (column 17, lines 24-49, Doerre). Saffer and Doerre, are analogous art because they are from the same field of endeavor of generating a content

classifier of a multitude of electronic documents. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Doerre's teachings into the Saffer system. A skilled artisan would have been motivated to combine as suggested by Doerre at column 4, lines 22-28, in order to be able to improve the ability and flexibility of the content classifier, so as to cope with the increasing number of documents to be analyzed in a reasonable amount of time.

Regarding Claim 6, the combination of Saffer in view of Doerre, disclose an apparatus wherein the characterizing information item associated with each cluster is the most common word of the textual information associated with each of the information items within each cluster (column 17, lines 14-30, Saffer).

Regarding Claim 9, the combination of Saffer in view of Doerre, disclose an apparatus wherein the information items are pre-processed for mapping (columns 10-11, lines 64-67 and 1-2, respectively, Saffer) by excluding words occurring within the textual information having more than a threshold frequency amongst the set of information items (column 13, lines 43-54, Doerre).

Regarding Claim 25, the combination of Saffer in view of Doerre, disclose an apparatus wherein the information items include a plurality of characterizing information features, the characterizing information features of each information item being used to form a feature vector for each information item (columns 9-10,

lines 62-67 and 1-15, respectively, Saffer), the feature vector being used to form the map data by mapping the information item onto a position within the array (column 19, lines 31-38, Saffer).

Regarding Claim 19, the combination of Saffer in view of Doerre, disclose a video acquisition and/or processing apparatus comprising an information retrieval apparatus wherein the information items include video data with the textual information (column 1, lines 44-49, Doerre).

Regarding Claim 20, the combination of Saffer in view of Doerre, disclose a video acquisition and/or processing apparatus comprising
a repository containing the information items (column 8, lines 40-48, Doerre), and
a data communications network for connecting the repository with the information retrieval apparatus (column 5, lines 38-46, Saffer).

17. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saffer (US Patent No. 6,990,238) filed September 30, 1999, in view of Doerre (US Patent No. 6,446,061) filed June 30, 1999, and further in view of Branscomb (US Patent No. 5,977,992) filed September 5, 1997.

Regarding Claim 21, the combination of Saffer in view of Doerre, disclose all of the claimed subject matter, as stated above. However, the Saffer in view of Doerre, are silent with respect the information items include a representative key stamp providing a representative image from the information item. On the other hand, Branscomb discloses the information items include a representative key stamp providing a representative image from the information item (column 5, lines 18-32, Branscomb). The combination of Saffer in view of Doerre, and further in view of Branscomb are analogous art because they are from the same field of endeavor of generating and storing video data. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Branscomb's teachings into the Saffer in view of Doerre system. A skilled artisan would have been motivated to combine as suggested by Branscomb at column 13, lines 55-63, in order to organize and assemble images in a relational graphic space via a content image, which provides a powerful interactive visual display. As a result, the system is therefore capable of alleviating the amount of time needed as well as decreasing the tediousness of the process.

Regarding Claim 22, the combination of Saffer in view of Doerre, and further in view of Branscomb, disclose a video acquisition and/or processing apparatus wherein the common characterizing information feature associated

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with a cluster includes a representative key stamp, which is common to the cluster (column 13, lines 34-44, Branscomb).

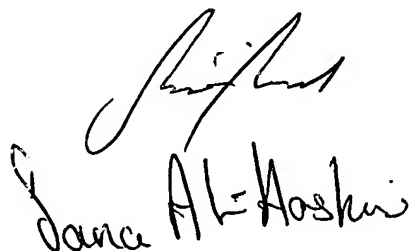
Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chelcie Daye whose telephone number is 571-272-3891. The examiner can normally be reached on M-F, 7:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chelcie Daye
Patent Examiner
Technology Center 2100
May 25, 2006


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